

OWNER'S GUIDE

10 CENTS

Model No.

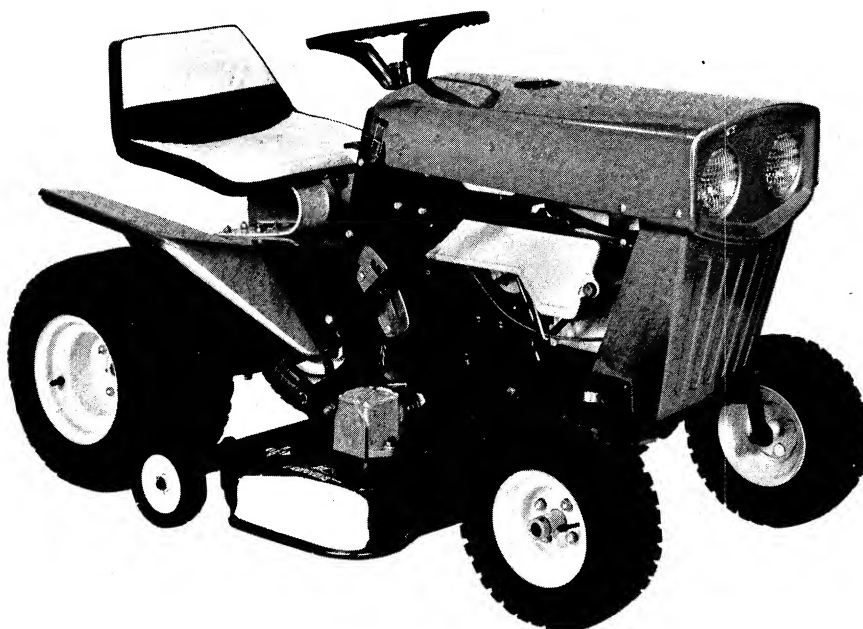
141-659 (Recoil Starter)

141-669 (Electric Starter)

191-651 (32" Mowing Unit)

GARDEN TRACTOR

WITH 32" ROTARY MOWER



WARRANTY

For one year from date of purchase, MTD Products Inc. will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.

MTD PRODUCTS INC • 5389 WEST 130TH ST. • P.O. BOX 2741 • CLEVELAND, OHIO 44111

Form No. 770-2900

SPECIFICATIONS

Cutting Width	Over All Height	Over All Width w/Mower	Over All Width w/o Mower	Turn Radius Inside	Over All Length	Weight	Tires — Rear	Tires — Front
32"	32"	34"	29"	24"	54"	141-659 435 Lbs.	18:00 x 6.50 Pneumatic	12:50 x 4.50 Pneumatic
						141-669 467 Lbs.	18:00 x 9.50 Pneumatic	12.50 x 4.50 Pneumatic

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ATTACHMENTS and ACCESSORIES

191-652 42" Angle Snow Blade	95 lbs.
191-653 10 cu. ft. dump utility cart	125 lbs.
191-658 30" Snow Blower	125 lbs.
191-659 32" Spike Aerator	55 lbs.
191-660 30" x 18" Drum Roller	65 lbs.
191-664* 18:00 x 6.50 — 8 Chains	15 lbs.
191-656 18:00 x 9.50 — 8 Chains	22 lbs.

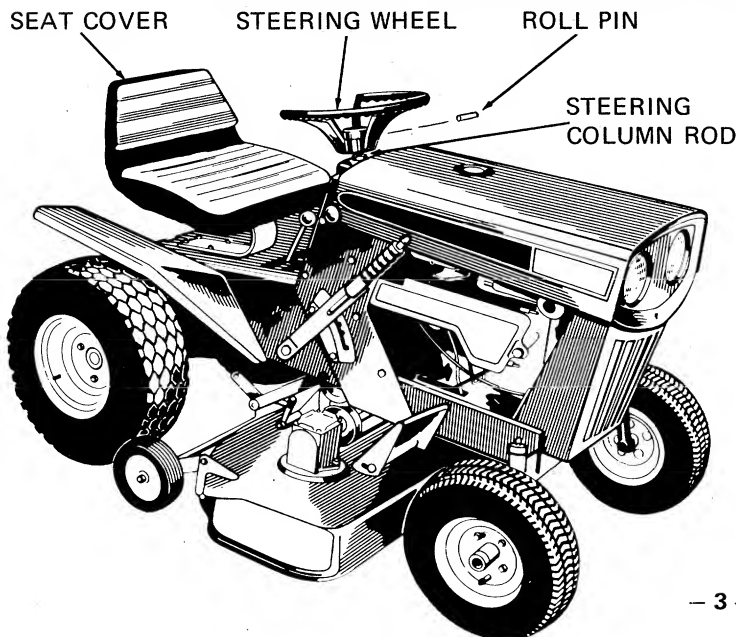
*Chains should be used with the 191-652 Snow Blade and the 191-658 Snow Blower.

SAFETY TIPS FOR GARDEN TRACTORS AND ATTACHMENTS

Improper use of riding lawn mowers, garden tractors and attachments on the part of the operator can result in injury. To reduce this possibility, give complete and undivided attention to the job at hand.

1. Know the controls and how to stop quickly — READ THE OWNER'S MANUAL.
2. Do not allow children to operate machine; nor adults to operate it without proper instruction.
3. Clear work area of objects which might be picked up and thrown.
4. Disengage all clutches and shift into neutral before starting motor. Keep hands, feet and clothing away from power driven parts.
5. Do not carry passengers. Keep children and pets a safe distance away.
6. Never direct discharge of any material toward by-standers nor allow anyone near machine while in operation.
7. Disengage power to any attachment and stop motor before leaving operator position.
8. Take precautions when leaving machine unattended (to avoid accidental starting, rolling away, accidental dropping of any attachment, etc.)
9. Disengage power to any attachment whenever it is not in use or when traveling from one work area to another.
10. Stay alert for holes and other hidden hazards.
11. Know what is behind you before backing up.
12. Beware of steep slopes; reduce speed on all side slopes and sharp turns to prevent tipping or losing control.
13. Don't stop or start suddenly when going uphill or downhill.
14. Use extra care when pulling loads or using heavy equipment. (Refer to your owner's manual)
15. Watch out for traffic when near roadways.
16. Handle gasoline with care — it is highly flammable.
 - A. Use approved gasoline container.
 - B. Never add gasoline to running motor — fill tank out of doors and wipe up spilled gasoline.
 - C. Replace gasoline cap securely.
 - D. Open doors if motor is run in garage — exhaust gases are dangerous.
17. Keep machine in good operating condition and keep safety devices in place. Use guards as instructed in owner's manual.
18. Disengage power to any attachment and stop motor before making repairs or adjustments.
19. While operating the mower, if any foreign object is struck, stop the mower and inspect for damage. Do not restart or operate the mower until all damage has been repaired.

ASSEMBLY AND PRE-OPERATING INSTRUCTIONS



STEERING WHEEL ASSEMBLY

1. Insert roll pin in the steering wheel just far enough to start it.
2. Be sure the pinion is in the center of the segment. Ten teeth from either end. See Fig. 22 & 16.
3. Hold the steering column rod from the bottom being sure the pinion is engaged with the gear segment.
4. Drive roll pin in the steering wheel through the steering column rod.

SEAT COVER

Slip the seat cover over the seat. Tie the string and tuck the ends into the cover.

INSTRUCTIONS FOR ACTIVATING DRY CHARGED BATTERIES

WARNING

SINCE BATTERY ACID IS CORROSIVE TO METALS, DO NOT POUR INTO ANY SINK OR DRAIN. RINSE EMPTY ELECTROLYTE CONTAINERS AND MUTILATE BEFORE DISCARDING. IF ACID IS ACCIDENTALLY SPILLED ON BATTERY DURING FILLING OR CHARGING, OR ON BENCH OR CLOTHING, ETC., FLUSH OFF WITH CLEAR WATER AND NEUTRALIZE WITH SODA OR AMMONIA SOLUTION.

1. Place battery to be filled on bench or workbench. Never activate battery in mower. Remove vent plugs from all cells.
2. Fill each cell carefully using battery grade 1.250-1.265 specific gravity Sulfuric Acid to 3/8" above the top of the separators or to the split ring.
3. Allow battery to set for 20 minutes. Battery can then be installed, however, to have maximum capacity the battery should be placed on a charger after the 20 minutes setting period. Battery can be charged at maximum of 35 amperes until the specific gravity reading is 1.265-1.275.
4. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225 remove battery and recharge.
5. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells. Coat the terminals with a thin coat of grease.
6. If the battery is not going to be used in the winter, remove the battery and store in a cool, dry place. Do not store directly on a concrete floor as this will drain the battery. Recharge whenever the specific gravity is less than 1.225.

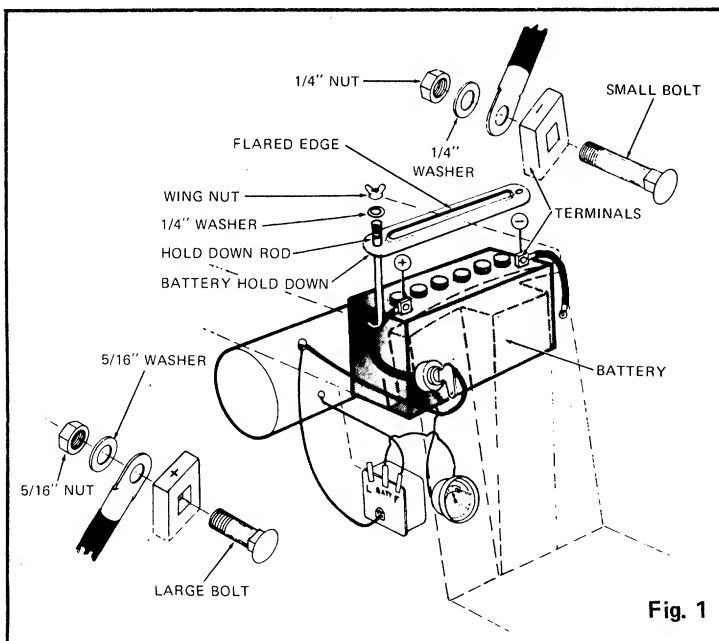
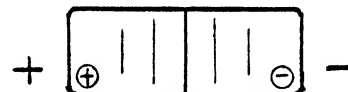
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Battery Specifications

32 AMP. HRS. AT 20 HRS.
PLATES PER CELL 9
ASSEMBLY LEFT HAND
WEIGHT WET 22 LBS.
WEIGHT DRY 17 LBS.

ELECTROLYTE 2 QUARTS
SPASH PROOF VENTS
TERMINALS (L) TYPE
1/4 BOLT FOR NEGATIVE
5/16 BOLT FOR POSITIVE

SIZE 7-3/4 X 5-1/8 X 7-17/64



PLACING BATTERY IN MOWER

1. Open hood of mower by loosening the black knobs on the side of the hood and lift the hood until it stays up.
2. Place the battery with the terminals to the rear of the mower. Hook both hold down rods under the battery case and place the battery hold down over the battery caps with the flared edge up as shown in Figure 2.
3. Place a 1/4" washer over the end of each rod and secure with two wing nuts.
4. Attach the negative terminal to the battery post with the 1/4" bolt, washer and nut as illustrated in Figure 1.
5. Attach the positive terminal to the battery post with the 5/16" bolt, washer and nut as illustrated in Figure 1.

CUTTING UNIT ASSEMBLY

To assemble the cutting unit, lubricate the wheel bearings with multi-purpose automotive grease and place wheels on the axle. Add one washer to each wheel and secure with cotter pin. See Figure 2.

ATTACHING THE CUTTING UNIT

1. Move the lift lever handle on the mower all the way down.
2. Move the blade engagement lever to "BLADE OFF" position.
3. Turn the height adjustment screw clockwise until the unit is in the lowest cutting position.
4. Drive or push the right rear wheel of the mower onto a brick or board to raise it about 2".
5. Have all six linkage arms towards the front of the unit. See Figure 2.
6. Slide the cutting unit under the mower. From the front of the mower, grasp both front linkage arms and roll the cutting unit all the way back until it touches the tie rods and fasten both linkage arms to the pins on the mower. Secure with cotter-hairpins. See Figure 4.
7. Lift the cutting unit slightly with your right hand and attach the rear, slotted links to the level extension. Secure with one washer and cotter-hairpin.
8. With your left hand depress the lift lever until the center links line up with the center weld pins in the frame of the riding mower. Secure with cotter-hairpins. See Figure 5.
9. Remove the large bolt holding the front of the belt guard and swing the belt guard out of the way.
10. With the lift lever depressed all the way attach the belt over the engine pulley. See Figure 6.
11. Reassemble belt guard.

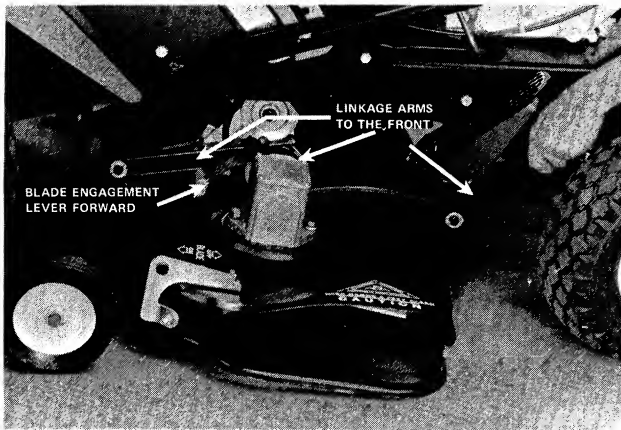
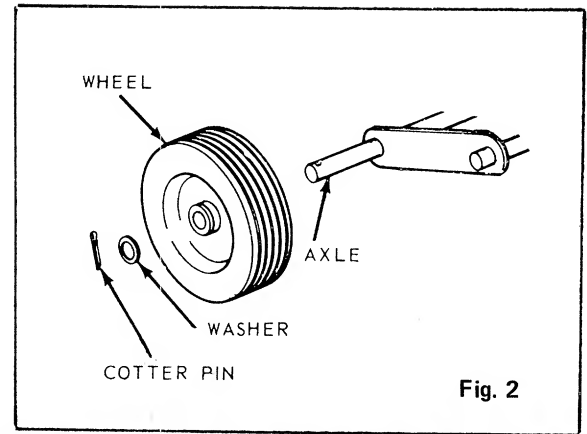


Fig. 3

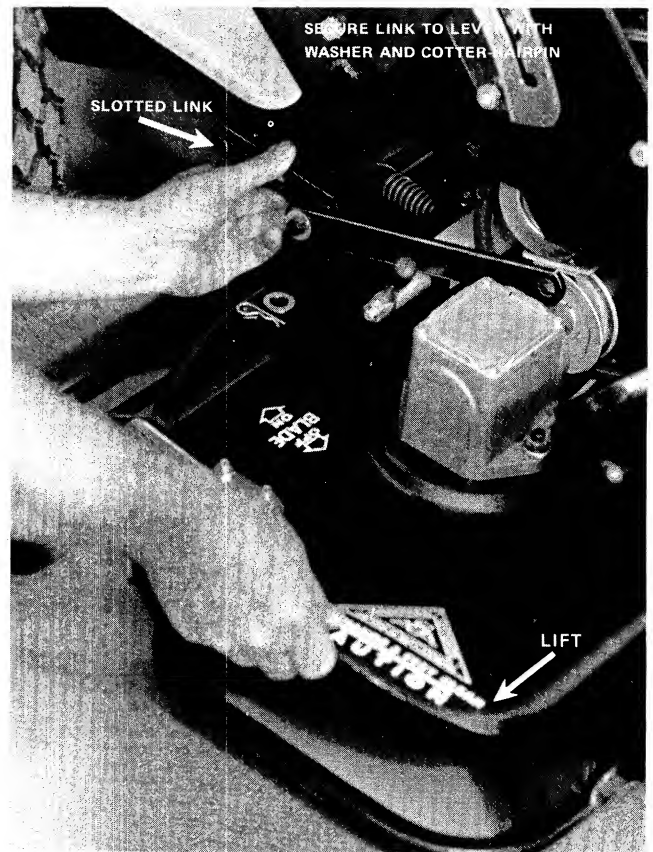


Fig. 4

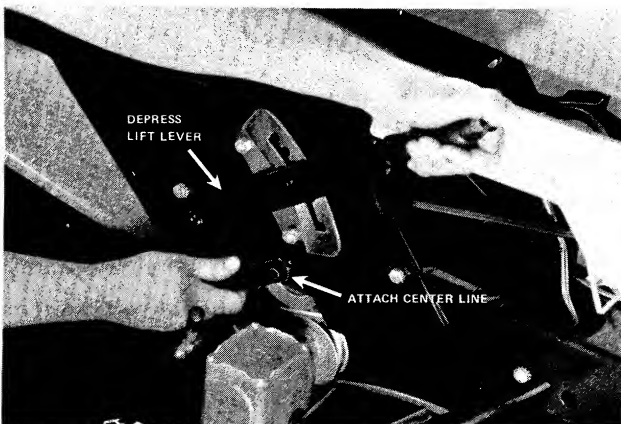


Fig. 5

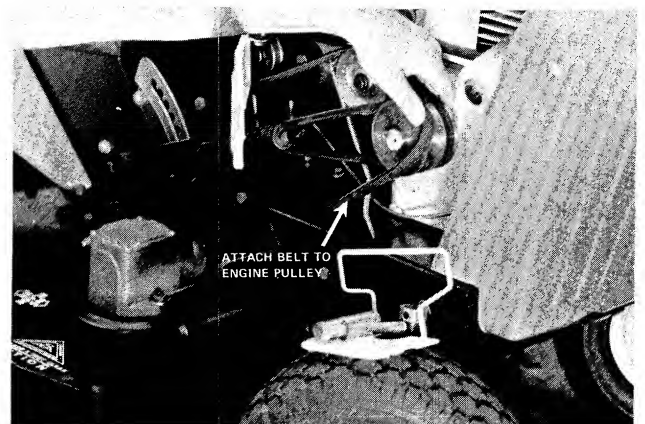


Fig. 6

ADD OIL TO ENGINE BEFORE STARTING

Add 2¾ pints of a high quality detergent oil (above 32° F use SAE 30W. Below 32° F use SAE 10W) to the crankcase and fill the gasoline tank with "regular gasoline." The tractor is shipped with all tires inflated to excessive pressure to protect the tractor during shipment. It is important to reduce the pressure to 15 psi before using the tractor.

KNOW YOUR MOWER

GASOLINE GAUGE



THROTTLE CONTROL

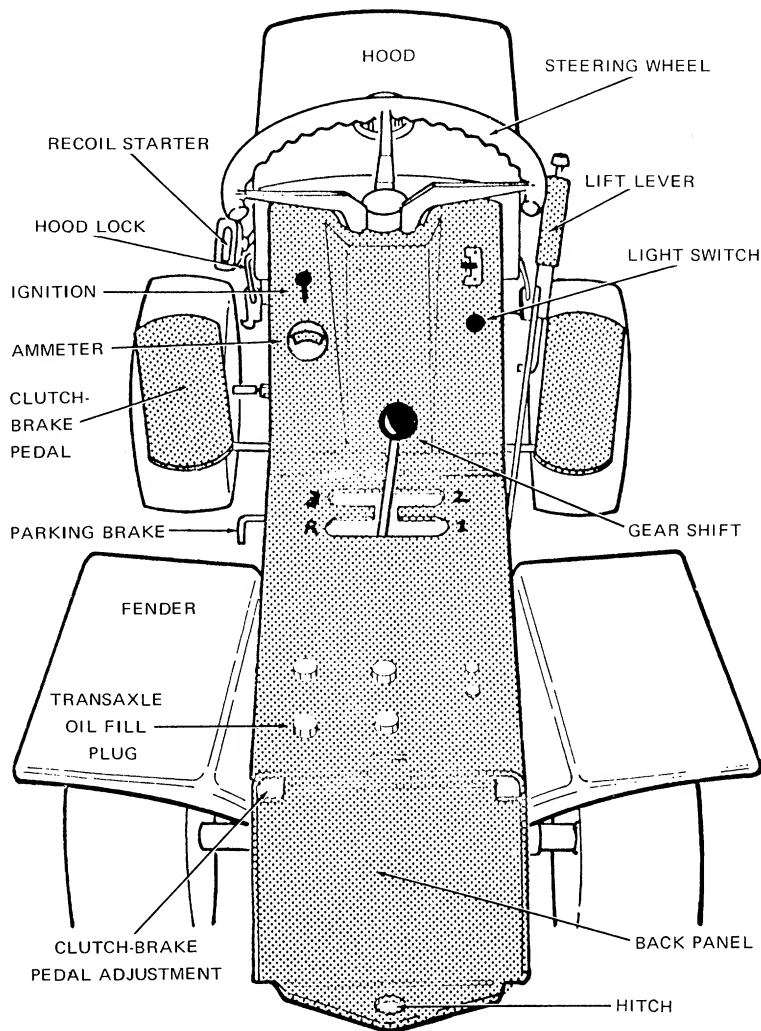
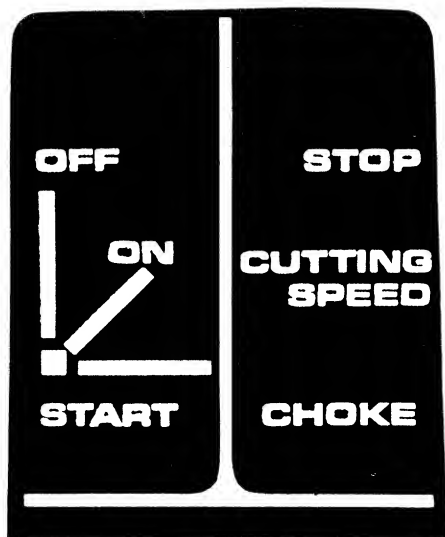


Fig. 7

CHOKE

The engine has a "choke-a-matic" choke. Move the throttle lever all the way up to place in the choke position. One lever operates the choke, regulates the engine speed and stops the engine.

LIFT LEVER

The lift lever is used to raise and lower the accessories such as the mower unit or snow blade in or out of position. To operate the lift lever, push forward slightly, depress the push cap on the top of the lever and move the lever either direction.

GASOLINE TANK

May be filled without opening the hood. ONE GALLON CAPACITY.

PARKING BRAKE

The parking brake is located on the left side of the tractor. To set the parking brake depress the clutch-brake pedal as far as possible and turn the parking brake lever clockwise until it tightens and holds the clutch-brake pedal down. To release, turn the parking brake lever counter-clockwise one turn.

TRANSMISSION

1st Gear . . . To climb steep hills, to hold back the tractor on downgrades and to pull heavy loads. MAXIMUM SPEED 2 MPH.

2nd Gear . . . NORMAL GRASS CUTTING RANGE. MAXIMUM SPEED 4 MPH.

3rd Gear . . . High speed for traveling with a light load over smooth surfaces. MAXIMUM SPEED 6 MPH.

Reverse Gear . . . To back up the tractor.

GEAR SHIFT LEVER

Three speeds forward and one in reverse. Do not shift gears while the tractor is in motion. Pick the gear to match the workload.

CLUTCH

The combination clutch and brake pedal can be operated with either foot or both by depressing the foot pedals. Depress all the way to declutch and brake. The clutch is operated by a V-Belt idler.

BRAKE

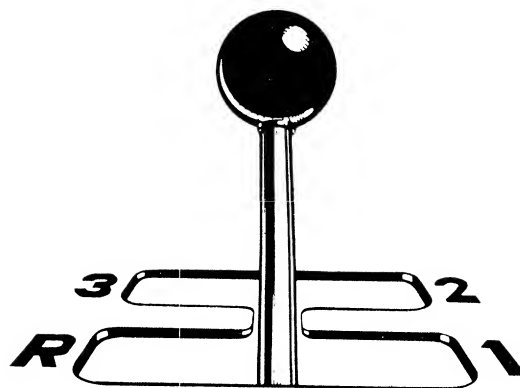
The brake is on the two rear wheels by means of a band that grips the transmission shaft. It is operated by depressing the Clutch-Brake Pedal all the way.

SEAT

Adjustable to four positions by removing the single hex nut under the seat spring and repositioning the seat and tightening the nut.

LIGHTS

(Electric Start Model Only) Pull light switch out to operate.



GEAR SHIFT LEVER

Fig. 8

FUEL SHUT-OFF VALVE AND IN-LINE FUEL FILTER

The fuel shut-off valve is to be used when the tractor is being stored for a period of time.

The in-line fuel filter is the "throw away" type. Replace the entire filter as necessary by removing the spring clips on the fuel line with a pair of pliers.

TIRE PRESSURE

Front . . . 15 psi Back . . . 15 psi

Overinflation causes slippage of rear wheels and underinflation causes excessive wear or sometimes causes inner tube damage.

OPERATING YOUR TRACTOR

A brief break-in period is necessary to insure maximum engine life. This consists of running the engine at half speed for a period of time required to use one tank full of gasoline. This is necessary on the initial run only. It is also recommended that the crankcase oil be changed after the first five hours of operation. This allows for the removal from the crankcase of any impurities which may have accumulated during the break-in period.

PRECAUTIONS

1. Do not fill the gasoline tank while the engine is running. Be careful not to spill gasoline on the engine.
2. Clean grass and leaves from the fins and air screen so the engine will not overheat.
3. Always remove the spark plug wire before making any adjustments or working on the unit. Turning the blade by hand can accidentally start the engine and cause injury if the sparkplug wire is connected.

STARTING INSTRUCTIONS

(See Fig. 7)

ELECTRIC START

1. Check engine oil. Fill to "FULL" mark on dipstick.
2. Be sure fuel shut off valve is open and the spark plug wire is connected.
3. Put gear shift lever in neutral.
4. Depress clutch-brake pedal. It may be held in position by tightening the parking brake.
5. Move the throttle lever to "CHOKE" position.
6. Insert key and turn clockwise and allow the starter to crank the engine.
7. After the engine starts, slowly return the throttle to the running position.
8. To stop the engine, move the throttle lever to "STOP" position.

RECOIL STARTER

1. Check engine oil. Fill to *Full Mark* on dipstick.
2. Be sure fuel shut off valve is open and the sparkplug wire is connected.
3. Put gear shift lever in neutral.
4. Depress clutch-brake pedal. It may be held in position by tightening the parking brake.
5. Move the throttle lever to "Choke" position.
6. While seated on the tractor pull the starter rope with a quick steady motion with your left hand.
7. Slowly return the throttle lever to the running position after the engine has started.

STOPPING THE BLADES IN THE CUTTING UNIT. Move the blade engagement lever forward to stop the blades from rotating. Do not attempt to work on the unit or remove grass from the chute without stopping the engine. The blade engagement lever should be forward (Blade Off) when starting the engine. See Fig. 9.

PUTTING THE TRACTOR IN MOTION (see Fig. 7-8)

1. Advance the throttle. When using the tractor for work loads, such as mowing or dozing, the engine should be running from $\frac{3}{4}$ to full throttle to prevent strain on the engine to operate equipment using the tractor engine as the source of power.

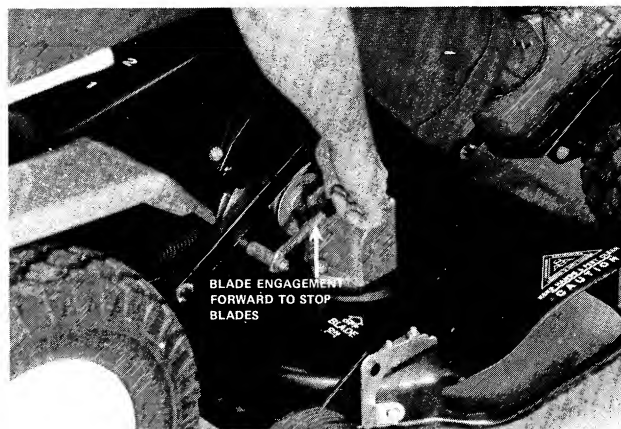


Fig. 9

2. Depress the Clutch-Brake pedal completely and move the gear shift lever to an appropriate gear to match the workload. Be sure that the tractor is NOT in motion when you change gears.
3. Release the Clutch-Brake pedal and you will put the tractor in motion.
4. To stop the mower, move the throttle control to "STOP" position. The ignition is automatically grounded. Keep the throttle control in "STOP" position at all times when the tractor is not in use.

CUTTING HEIGHT ADJUSTMENT (see Fig. 10)

Turn the height adjustment screw on the left hand side of the mowing unit counter-clockwise to lower the cutting height. The mowing can be adjusted to cut between $1\frac{1}{2}$ " and $3\frac{1}{2}$ ". Be sure the lift lever is all the way UP when mowing so that the wheels on the mowing unit support the weight of the mowing unit.

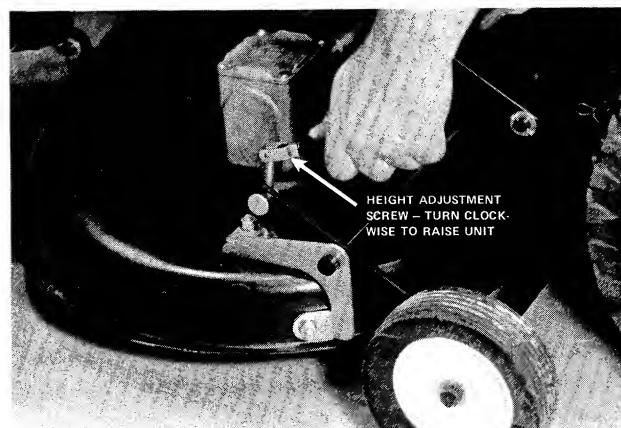


Fig. 10

LUBRICATION & MAINTENANCE

1. **Engine** — See Engine Manual — Use high quality detergent oil. Above 32° F use SAE 30. Below 32° use SAE 10.
2. **Transaxle** — The transaxle is lubricated at the factory with three pints of SAE 90 E.P. oil. When replacing or adding oil fill until it begins to overflow through check plug. Maintain oil at this level. When checking and lubricating transaxle remove the left rear bolt that holds the transaxle to the tractor frame and add oil through this hole. (see Fig. 7).

GREASE FITTINGS

3. **Steering Pins** — Use automotive multipurpose grease. Use hand or pressure type gun.

APPLY AUTOMOTIVE MULTI-PURPOSE TYPE GREASE TO THE FOLLOWING LOCATIONS.

4. Guide slot for steering segment.
5. Pinion gear for steering.
6. Mower unit pivot pin.
7. Steering pivot pin (turn steering to either side to lubricate bearing surface).
8. Front axle pivot bolt.

APPLY MACHINE OIL TO THE FOLLOWING LOCATIONS.

9. Clutch-Brake Pedal pivot point.
10. Lift lever pivot point.
11. Idler pivot and idler arm.

The following items are permanently lubricated and require no additional lubrication.

1. All idler bearings.
2. Tie rod ends.
3. All wheel bearings.
4. All steering column bearings.

NEVER LUBRICATE OR PERFORM MAINTENANCE WHILE THE ENGINE IS RUNNING OR THE SPARKPLUG WIRE IS CONNECTED TO THE PLUG.

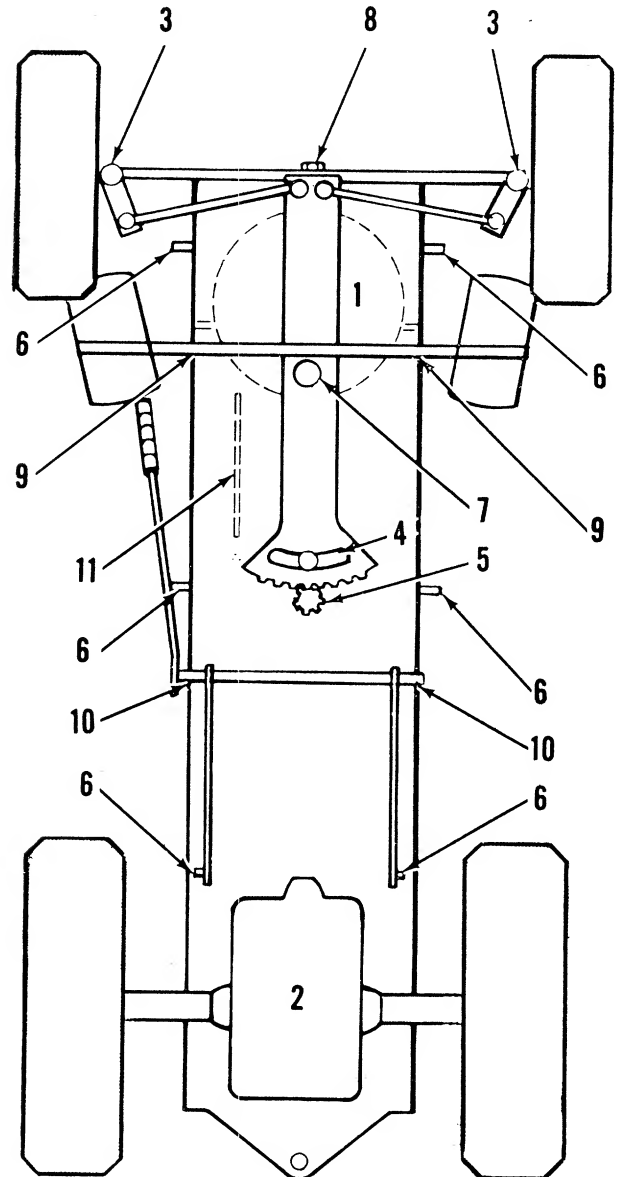


Fig. 11

SCHEDULE OF LUBRICATION AND MAINTENANCE	SEE NOTES	AFTER EVERY 24 HRS. OF OPERATION	ONCE EACH SEASON
Change Engine Oil	(1)	X	—
Replace Fuel Filter	(2)	—	X
Clean Air Filter	(1)	X	—
Clean and Gap Spark Plug	(6)	—	X
Change Transaxle Oil	(3)	—	X
Check Tire Pressure	(4)	X	—
Grease Fittings	(5)	X	—
Oil and Grease Points		X	—

Notes:

1. See Engine Manual.
2. Replace fuel filter once each season or as necessary.
3. Drain from bottom plug. Fill and check oil level from plug on the front side of the transaxle.
4. Front and Rear Tires 15 psi.
5. Use hand or pressure type gun.
6. Set plugs at .025.

LUBRICATION – CUTTING UNIT (See Fig. 24)

RIGHT ANGLE DRIVES – Check oil level after every 25 hours of operation. Lubricate with 4 oz. of E.P.G. Lithium grease. Grease level should cover input shaft.

WHEELS – Grease once each season with a hand or pressure type grease gun. Use multipurpose automotive type grease.

LINKAGE ARMS – Lubricate after every 25 hours of use. Use multi-purpose automotive type grease on the pins on the frame (See A, B and C).

ALL OTHER MOVING PARTS – Lubricate once each season with light machine oil.

ADJUSTMENTS

WHEEL ADJUSTMENT (See Fig. 12 & 13)

The caster (forward slant of the kingpin) and the camber (tilt of the wheels out at the top) requires no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch. To adjust the toe-in, loosen

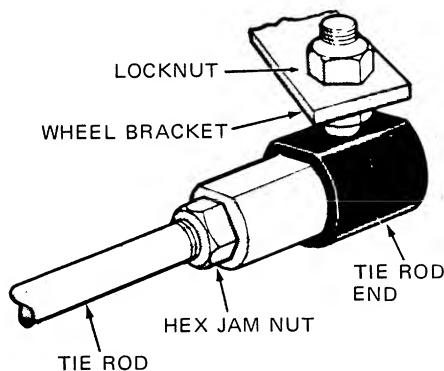


Fig. 12

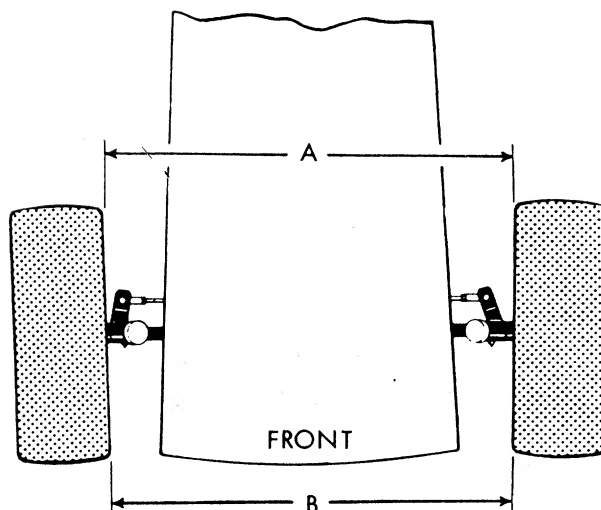


Fig. 13

the hex jam nut, remove the elastic locknut, drop the tie-rod end out of the hole in the steering arm and screw the tie-rod end in or out to make the adjustment (Fig. 13). The distance "B" must be less than "A" by 1/8 inch.

ENGINE

For engine adjustments see the engine manual.

WHEEL REMOVAL

Front . . . Loosen the set screw and remove the collar. The wheel pulls off by hand.

Rear . . . Remove the snap ring with Waldes Truarc Plier No. 4. The wheel pulls off by hand.

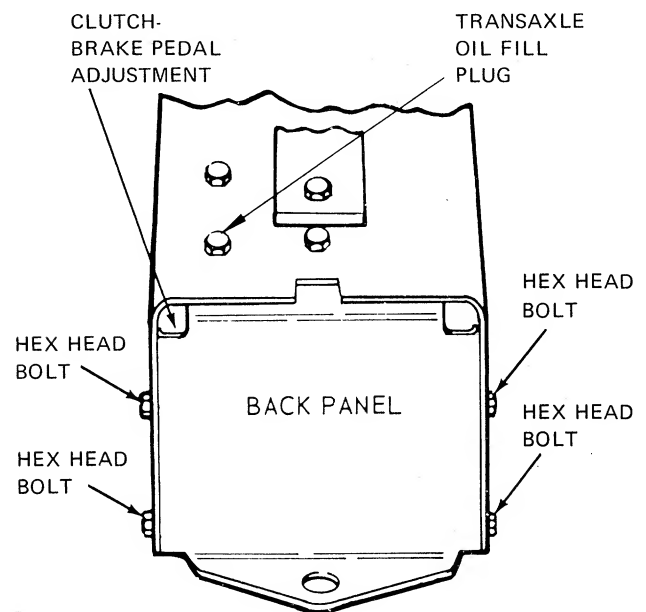


Fig. 14

CLUTCH-BRAKE PEDAL ADJUSTMENT (See Fig. 14 & 15)

To adjust the angle of the clutch-brake pedal, remove the cotter pin on the clutch rod and turn the clutch rod in or out of the ferrule to obtain the most comfortable angle of the pedal when the pedal is released. After making any adjustments be sure the belt guard does not rub on the belt.

The brake adjustment is made by using a deep well socket and a wrench and turning the adjusting nut through the opening on the back panel or by using a standard wrench and removing the hex head bolts and removing the back panel.

The brake should be adjusted so that when the pedal is depressed completely the belt guard is *NOT* lower than the top edge of the engine pulley. Over-adjustment will cause excessive belt wear.

NOTE: DO NOT ALLOW SPRING TENSION IDLER TO PIVOT BEYOND THIS POINT WHEN BRAKE IS APPLIED. ADJUST BRAKE TO PLACE SPRING TENSION IDLER IN PROPER POSITION.

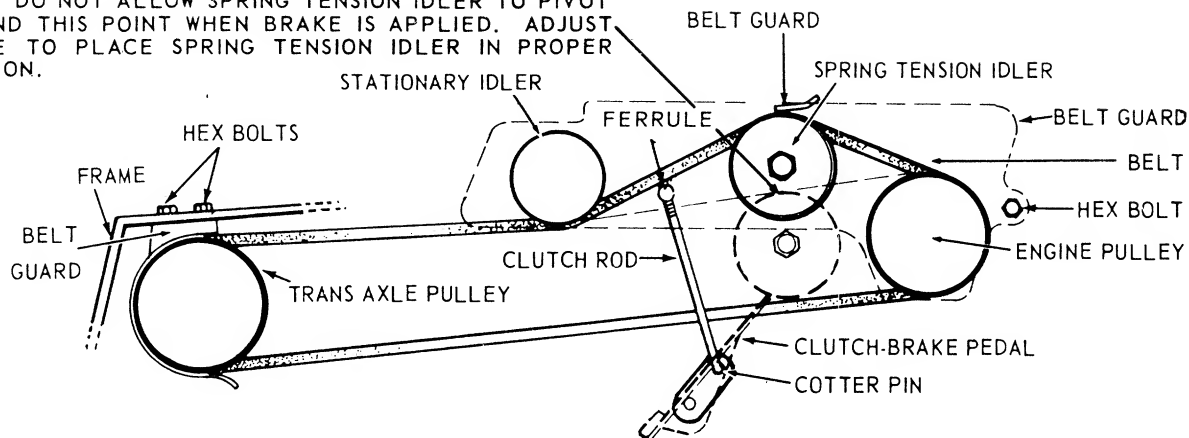


Fig. 15

ENGINE BELT REMOVAL (See Fig. 15)

To remove the engine belt . . .

1. Remove the belt guard and the trap out assembly by removing the large hex bolt holding the belt guard in place. The belt guard can be pivoted out of the way.
2. Depress the Clutch-Brake pedal all the way and tighten the parking brake.
3. Remove the back panel and remove the two hex bolts on the right hand side of the frame under the seat and remove the rear belt guard.
4. Remove the hex nut on the spring tension idler and remove the belt guard and belt.
5. Replace belt and re-assemble.

STEERING ADJUSTMENT (See Fig. 16)

The "play" or looseness of the steering can be adjusted by loosening the two hex bolts on the bracket and lightly tapping the bracket towards the front of the tractor. If the pinion gear becomes worn it can be rotated one half turn by removing the pin.

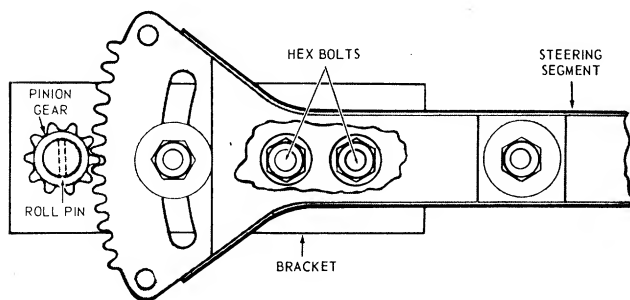


Fig. 16

BELT ADJUSTMENT

The belts are automatically adjusted by the idlers.

CUTTING UNIT BELT REMOVAL (See Fig. 24)

The belt is a standard size 21/32" x 48".

1. Remove the hex head cap screw (46) and hex nut (2) on the V-Belt idler (45).
2. Remove both hex head cap screws (32) and hex nuts (38) holding the left hand right angle drive to the deck.
3. Remove the "E" ring (14) on the shaft (21) with a screwdriver and slide the collar (24) towards the center of the mowing unit.
4. Remove the belt.
5. Reassemble.

REMOVING AND SHARPENING THE BLADES

The blades are held with a hex centerlock nut (30) and a spring lockwasher (31). To remove, wrap the blade's cutting edge with a rag and remove the hex centerlock nut (30).

When grinding or filing the blades to sharpen them, remove equal amounts of metal from both edges to keep the blade in balance. The blade can be tested for balance by balancing it on a knife blade held in a vise. Remove metal from the heavy side until it balances directly over the center hole in the blade. When replacing the blade, be sure that the air-foil is turned up and the blades are timed. (See below).

TIMING THE BLADES (See Fig. 17)

The blades have to be timed whenever the belt is removed or the shaft is disconnected from the right angle drive. To time, remove the "E" ring (14) with a screwdriver on the shaft (21), slide the collar (24) towards the center of the unit and turn the blades so they are perpendicular to each other as shown. Slide the collar back and put the "E" ring back in place.

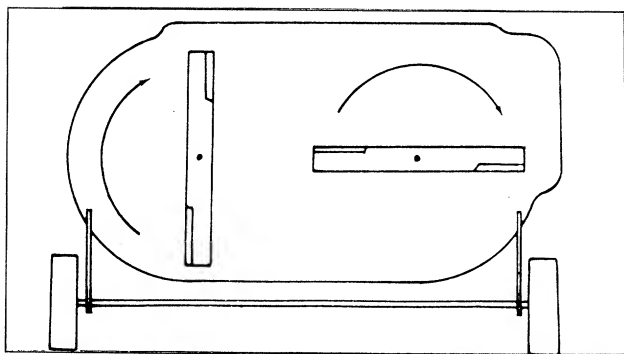


Fig. 17

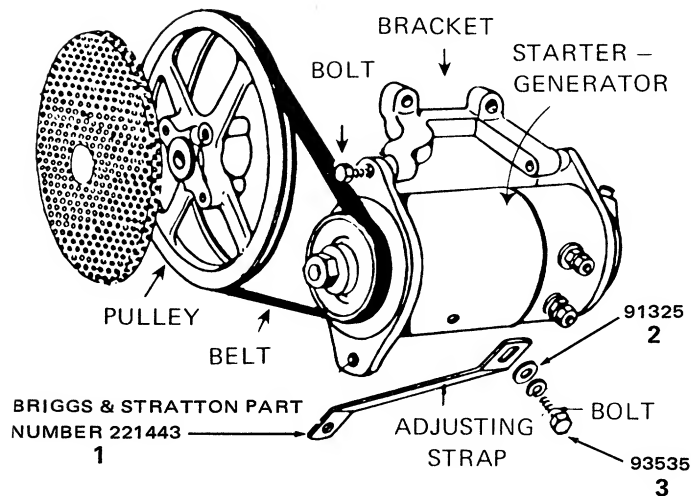


Fig. 18

PARTS 1, 2, & 3 ORDER FROM BRIGGS & STRATTON

STARTER-GENERATOR BELT ADJUSTMENT:

(See Fig. 18)

After the first ten hours of operation and periodically thereafter, the belt should be tightened or checked on the starter-generator. If the starter-generator turns over and the engine does not crank or there is a high pitched squeel when the starter-generator is turned on, it is an indication of a loose belt. To tighten, LOOSEN the two bolts on the bracket and LOOSEN the two bolts on the adjusting strap. Swing the starter-generator away from the engine, towards the rear of the mower, until the belt is tight. (Belt should deflect $\frac{1}{4}$ " when depressed with your thumb.) Tighten all bolts.

TROUBLE SHOOTING

An uncut strip of grass down the center of the path of the cutting unit can be caused by the following:

1. Engine speed is too slow. The engine should be running a near full speed.

2. Wrong gear selection. Second gear is for normal grass cutting. Heavy grass should be cut in first gear.
3. Short blade (s). Everytime a blade is sharpened, it is shortened slightly. When balancing the blade, grind from the back side, not the end to balance. The blade should measure at least 16-3/8" from tip to tip measured on the diagonal.
4. Dull blades can leave an uncut strip of grass.
5. Be sure the blades are NOT installed upside down. The air foil on the back of the blade should always be up when the deck is in the cutting position.
6. The blade drive belt may be slipping. This can be caused by:
 - a. worn drive belt
 - b. weak spring on the tension bracket (39).
 - c. worn drive pulley on the right angle drive unit.

NOTE: This instruction manual covers various models and all accessories shown do not necessarily apply to your model mower.



If repairs or service is needed on the engine, please contact your nearest, authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline".

ILLUSTRATION AND PARTS LIST FOR 12 VOLT ELECTRIC SYSTEM

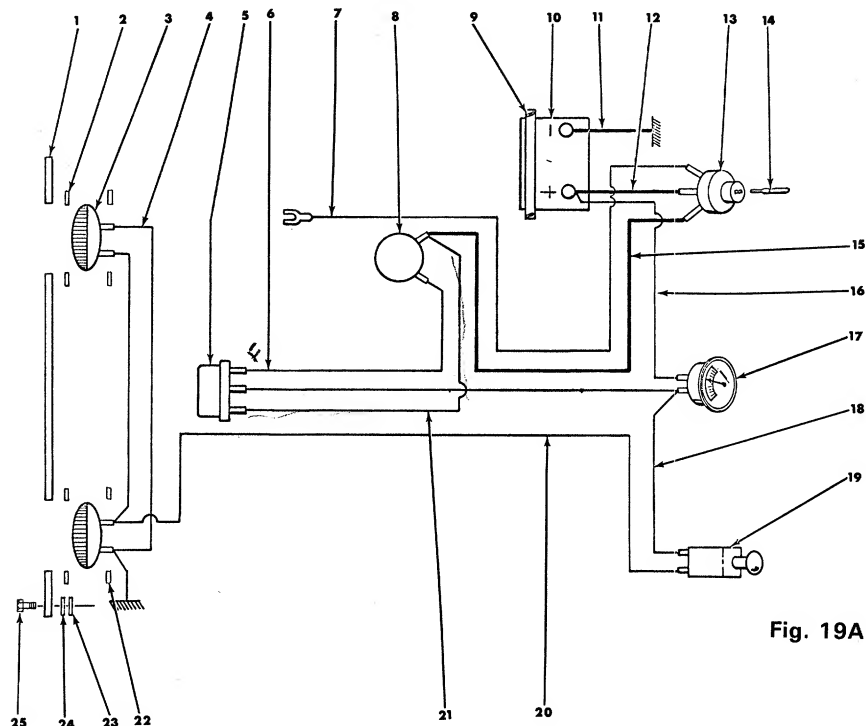


Fig. 19A

PARTS LIST FOR 141-669 ELECTRICAL SYSTEM

REF. NO.	PART NO.	DESCRIPTION
1	437-9958	Headlamp Bezel
2	721-112	Gasket
3	725-222	Headlamp
4	725-204	Wire 18 Ga. 13" Lg. Black—Headlamp to Ground
5	725-120	Voltage Regulator
6	725-123	Wire 18 Ga. 9-1/2" Lg. Red—Regulator to Gen.
7	725-220	Wire 18 Ga. 25" Lg. Yellow—Magneto Wire
8	725-143	Starter—Generator
9	348-8821	Battery Hold Down
	711-222	Battery Hold Down Rod
	736-329	Spring Lockwasher
	712-113	Wing Nut
10	725-117	Battery
11	725-122	Wire 6 Ga. 7-1/4" Lg. Red—Battery to Ground
12	725-122	Wire 6 Ga. 7-1/4" Lg. Red—Battery to Switch
13	725-199	Starter Switch—Key Operated
14	725-201	Starter Key
15	725-121	Wire 6 Ga. 17-1/4" Lg. Red—Switch to Starter
16	725-124	Wire 18 Ga. 3-1/2" Lg. Red—Switch to Ammeter
17	725-119	Ammeter
18	725-231	Wire 18 Ga. 9-1/2" Lg. Blue—Reg. to Amp. to L. Switch
19	725-202	Headlamp Switch
20	725-219	Wire 18 Ga. 52" Lg. Blue—Headlamp to Switch
21	725-123	Wire 18 Ga. 9-1/2" Lg. Red—Regulator to Starter
22	437-9960	Headlamp Ring
23	712-287	Hex Nut 1/4-20 Thd.
24	736-329	Spring Lockwasher 1/4" Scr.
25	710-346	Hex Hd. Cap Scr. 1/4-20 x 1-1/2" Lg.

ILLUSTRATION AND PARTS LIST FOR STARTER-GENERATOR

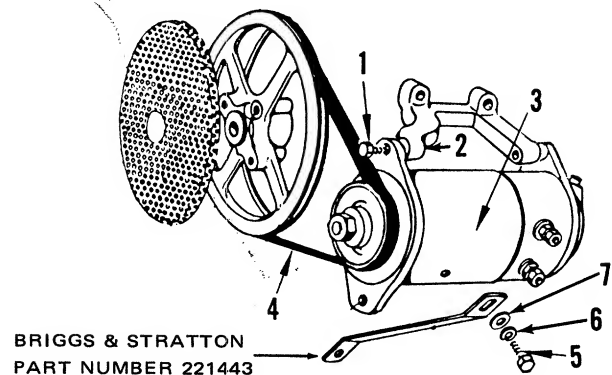


Fig. 19B

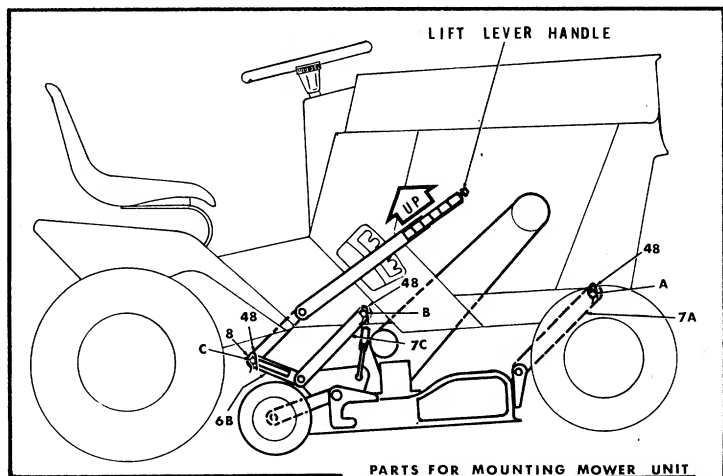
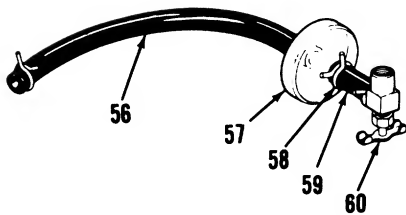
Illus. No.	Part No.	DESCRIPTION
1	710-380	Hex Head Cap Screw 5/16-18 x 1-3/4 lg.
2	712-267	Hex Nut 5/16-18 Thd.
3	725-143	Starter - Generator
4	754-134	V-Belt 3/8 x 33-1/8 lg.
5	710-408	Hex Head Cap Screw 5/16-18 x 3/4 lg.
6	736-119	Spring Lockwasher 5/16"
7	736-107	Flat Washer

Left Side of Tractor

Fig. 20

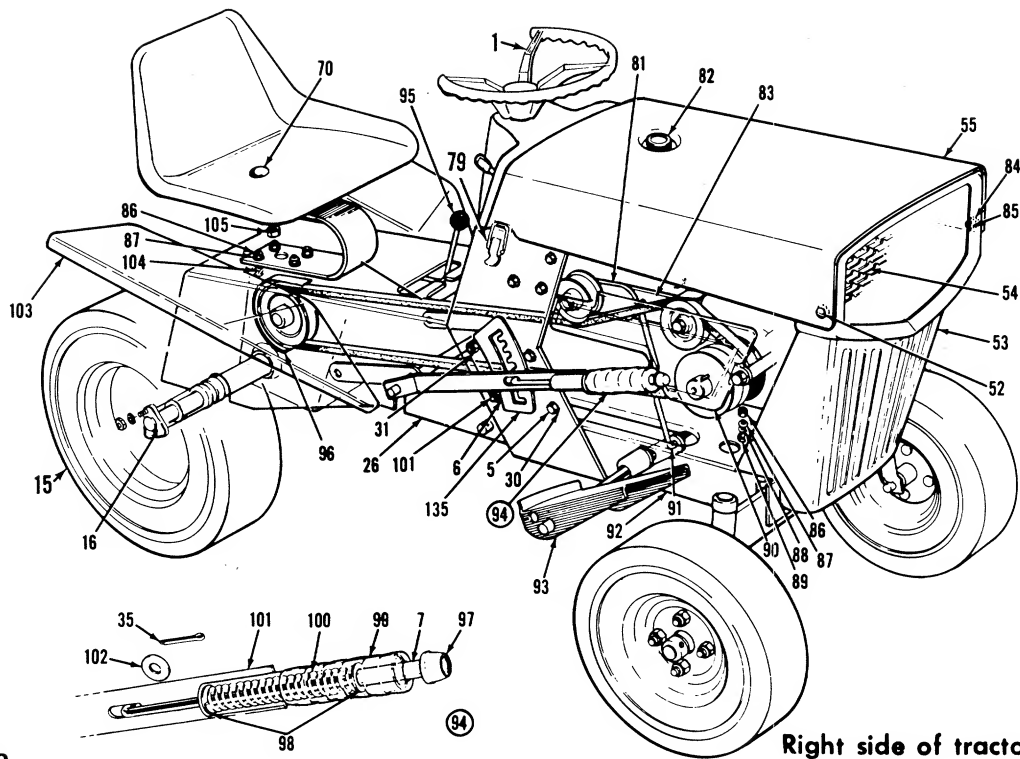
LIFT LEVER HANDLE

Fig. 20



PARTS FOR MOUNTING MOWER UNIT		
REF. NO.	PART NO.	DESCRIPTION
A	— — —	weld pin 1 req.
B	— — —	weld pin 2 req.
C	— — —	weld pin 2 req.
6B	321-8631	lockout link 2 req.
7A	321-8632	deck link 2 req.
7C	321-8632	deck link 2 req.
8	736-466	flat washer 2 req.
48	714-101	hair pin 6 req.

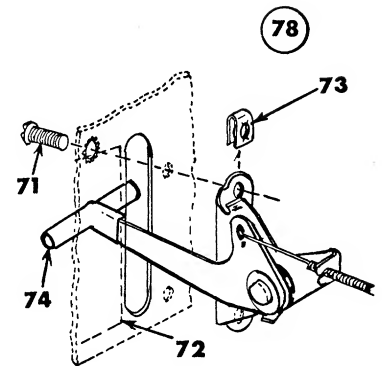
- 14 -



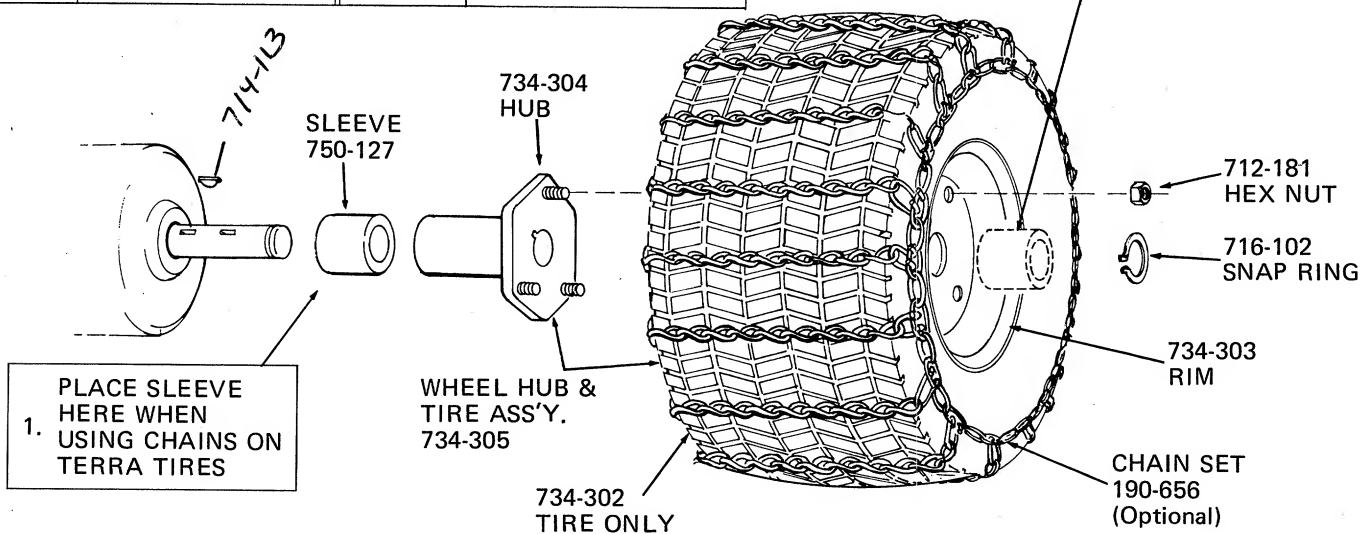
Right side of tractor

TERRA TIRES

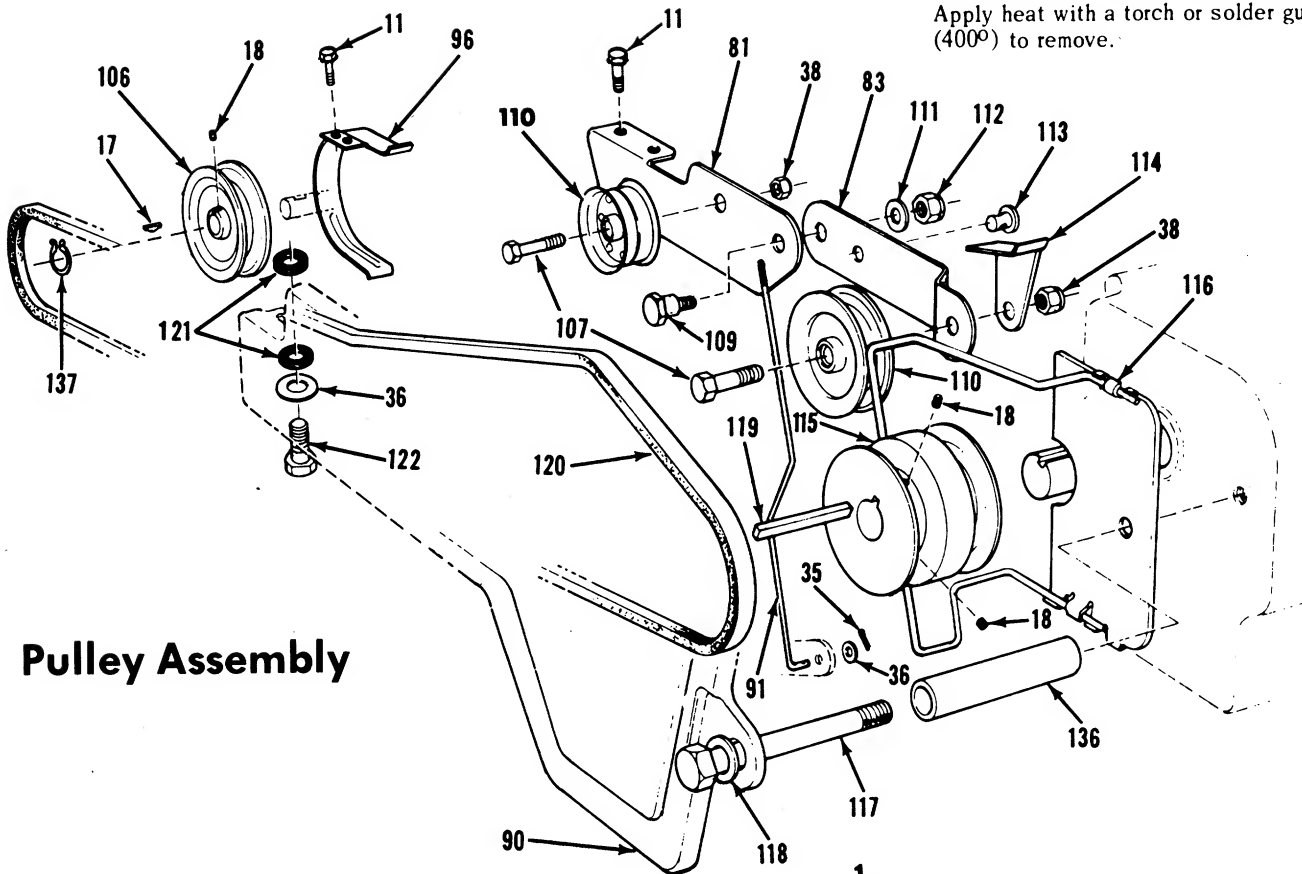
FRONT 12.50 X 4.50-6			
TUBE TYPE		TUBELESS	
501-10164	Wheel Assembly - Complete	502-10108	Wheel Assembly - Complete
312-10164	Rim Only	312-10108	Rim Only
734-218	Tire Only 12.50 x 4.50-6	734-298	Tubeless 12.50 x 4.50-6
734-219	Tube Only 12.50 x 4.50-6	312-8783	Hub
312-8783	Hub	734-255	Valve Stem
REAR 18.00 X 6.50-8			
TUBE TYPE		TUBELESS	
505-9262	Wheel Assembly - Complete	504-9262	Wheel Assembly - Complete
312-9262	Rim Only	312-9262	Rim Only
734-308	Tire Only 18.00 x 6.50-8	734-294	Tubeless 18.00 x 6.50-8
734-310	Tube Only 18.00 x 6.50-8	312-9265	Hub
312-9265	Hub	734-255	Valve Stem
REAR 18.00 X 9.50-8		FRONT 13.00 X 5.00-6	
TUBELESS		TUBELESS	
734-305	Wheel Assembly - Complete	503-10108	Wheel Assembly - Complete
734-303	Rim Only	312-10108	Rim Only
734-302	Tubeless 18.00 x 9.50-8	734-321	Tubeless 13.00 x 5.00-6
734-304	Hub	734-255	Valve Stem
750-127	Sleeve		



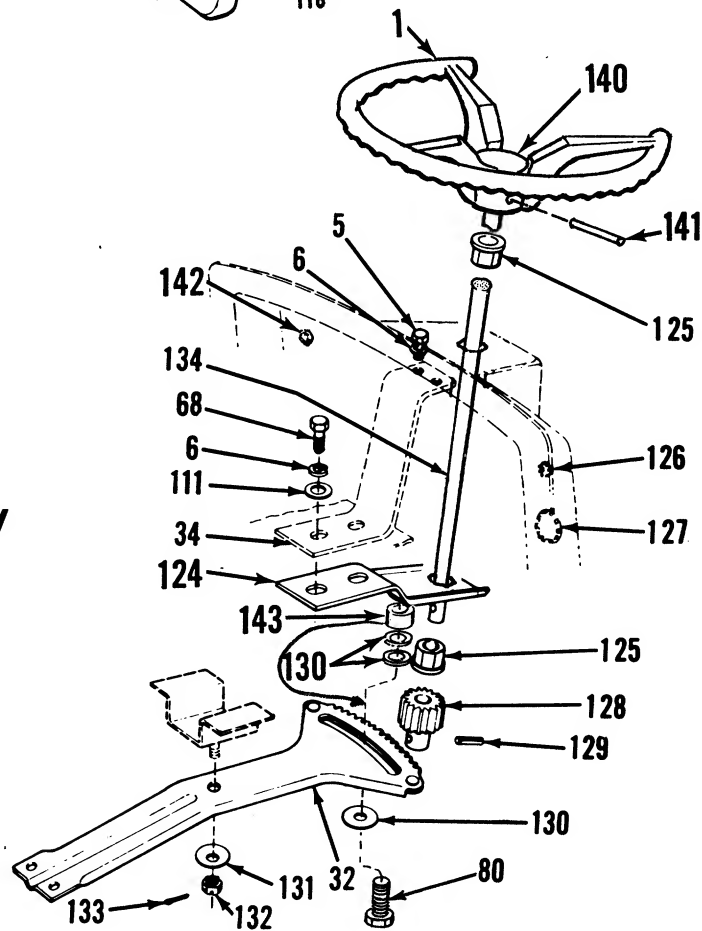
PLACE SLEEVE HERE WHEN
2. USING 32" GRASS-CUTTING
ATTACHMENT



NOTE: Set screw in engine pulley is treated with a nut and bolt sealant. Apply heat with a torch or solder gun (400°) to remove.



Pulley Assembly



Steering Assembly

Fig. 22

PARTS LIST FOR GARDEN TRACTOR MODELS 141-659, 141-669

Illus. No.	Part No.	DESCRIPTION	Illus. No.	Part No.	DESCRIPTION	Illus. No.	Part No.	DESCRIPTION
1	723-205	Steering Wheel Assy.	44	438-8609	Axle Assy - Front Left Hand	97	726-106	Push Cap †
2	438-10090	Dash Panel Assy. (Recoil)	45	737-107	Grease Fitting, Alemite 3005	98	736-300	Flat Washer
3	312-8535	Seat Assembly (not shown)	46	711-209	Tie Rod			3/8 ID x 7/8 OD x 16 Ga. *
4	723-232	Seat Cushion	47	438-8614	Pivot Bar Assy	99	305-8818	Grip †
5	723-146	Seat Spring	48	712-711	Hex Jam Nut 3/8-24 Thd. *	100	732-156	Compression Spring †
6	710-216	Hex Head Cap Screw	49	710-298	Hex Hd. Bolt 5/8-18 x 3-1/2 lg. *	101	438-8642	Left Handle Assy †
7	736-169	3/8-16 x 3/4 lg. *	50	438-8608	Axle Assy - Front - Right Hand	102	736-133	Flat Washer
8	750-124	Spring Lockwasher 3/8 Scr. *	51	312-8783	Hub Assy			7/16 ID x 1-3/8 OD x 14 Ga. *
9	712-429	Spacer Tube †	52	710-255	Truss Head Machine Screw	103	312-8694	Fender - Right Hand
10	312-8695	Hex Elastic Nut 5/16-18 Thd. *	53	438-8670	1/4-20 x 3/4 lg. *	104	710-444	Hex Head Cap Screw
11	310-8622	Fender Left Hand	55	438-8674	Grill Panel - (Recoil)	105	712-384	5/16-18 x 1 lg. *
12	438-8597	Brake Assy - complete	56	312-10100	Top Hood Assy	106	756-118	Hex Centerlock Nut 1/2-13 Thd. *
13	711-205	Sems Hex Head Cap Screw	57	723-153	Gas Hose 10-1/2 lg. Rubber	107	710-113	Pulley
14	714-113	5/16-18 x 3/4 lg. *	58	723-154	Gas Filter Carter FN-3630-S			3/8-24 x 1-5/8 (Heat Treat) *
15	504-9262	Frame Plate Assy.	59	723-157	Hose Clamp 1/2 OD - Eaton R8	108	756-117	Flat Idler
16	734-305	Brake Disc.	60	723-152	Gas Hose 1-1/2 lg. Rubber	109	710-373	Shoulder Bolt
17	711-205	Hi Pro Key HP #708 *	61	723-159	Gas Valve Dexter	110	756-116	V-Idler
18	710-421	Rear Wheel Assy.	62	723-149	Gas Tank	111	736-300	Flat Washer
19	717-125	(140-650), (140-665)	63	723-151	Strap - Gas Tank			3/8 ID x 7/8 OD x 16 Ga. *
20	710-179	Rear Wheel Assy.	64	438-8638	Battery Box Assy	112	712-430	Hex Elastic Nut 3/8-16 Thd. *
21	716-102	Snap Ring Truarc 5100-100 *	65	710-188	Allen Set Screw Cup Pnt.	113	711-179	Ferrule - Adjustable
22	714-314	Hi Pro Key HP #606 *	66	712-492	1/4-28 x 3/16 lg. *	114	310-8664	Belt Keeper
23	710-209	Allen Set Screw Cup Pnt.	67	710-279	Square Nut 1/4-20 Thd. *	115	756-140	Engine Sheave
24	717-125	5/16-18 x 1/4 lg. *	68	710-253	Phillips Filler Hd. Mach.	116	438-8689	Belt Trayout Brkt. Assy
25	711-207	Transaxle Gear Box	69	732-155	Hex Hd. Cap Scr. 3/8-16 x 1 lg. *	117	710-285	Hex Head Cap Screw
26	712-923	Hex Head Thd. Cut. Screw	70	710-385	Extension Spring			1/2-20 x 3-3/4 lg. *
27	438-8589	1/4-20 x 1/2 Type F *	71	710-192	Carriage Bolt 1/2-13 x 1 lg. *	118	736-114	Lockwasher 1/2 Screw *
28	711-203	External Lockwasher 1/4 Scr. *	72	712-147	Truss Head Machine Screw	119	714-114	Square Key 1/4 sq. x 2 lg. *
29	736-148	Sems Hex Head Cap Screw	73	722-111	10-24 x 3/8 lg. *	120	754-112	V-Belt 21/32 x 80 lg. *
30	712-798	3/8-16 x 5/8 lg. *	74	722-111	Speed Nut 10-24 Thd. *	121	736-161	Rubber Washer
31	712-798	Pivot Mounting Bracket	75	746-126	Control Knob	122	710-122	Hex Head Cap Screw
32	438-8599	Lock Handle	76	723-209	Throttle Control (complete)			5/16-24 x 1 lg. *
33	726-106	Centerlock Jam Nut	77	710-344	Hood Lock	124	438-10043	Lower Mounting Bracket
34	438-8618	5/8-18 Thd. *	78	438-8620	Hex Head Cap Scr.	125	748-227	Bearing
35	714-474	Ferrule - Brake Lock	79	732-155	3/16 x 1 1/2 lg.	126	726-112	Plug Button 5/8 Pin (Recoil)
36	736-264	Brake Rod	80	710-344	Clutch Mount Brkt. Assy	127	726-113	Plug Button 2 3/32 dia. (Recoil)
37	748-386	Hex Head Step Bolt	81	438-8620	Gas Gauge	128	717-127	Spur Gear
38	712-116	External Lockwasher 3/8 Scr. *	82	730-155	Clutch Bracket	129	715-247	Roll Pin 3/16 Dia. x 1 lg. *
39	723-156	Steering Segment Assy	83	910-9200	Clutch Washer	130	310-7386	Flat Washer
40	502-10108	Push Cap 1/4 Dia.	84	736-463	9/32 ID x 5/8 OD x 16 Ga. *	131	736-112	Belleville Washer
41	748-143	Reinforcement Brkt. Assy	85	712-324	Hex Elastic Nut 1/4-20 Thd. *			17/32 ID x 1-5/8 OD x 18 Ga. *
42	712-181	Cotter Pin 1/8 Dia. x 3/4 lg. *	86	712-267	Hex Nut 5/16-18 Thd. *	132	712-114	Castle Nut 1/2-20 Thd. *
43	502-10108	Flat Washer 5/16 S.A.E. *	87	736-119	Spring Lockwasher 5/16 Scr. *	133	714-115	Cotter Pin 1/8 Dia. x 1 lg. *
		Collar	88	736-607	Ext. Lockwasher 5/16 Scr. *	134	711-403	Steering Column Rod
		Hex Elastic Nut 3/8-24 Thd. *	89	710-380	Hex Head Cap Screw	135	310-8630	Index Bracket
		Tie Rod End	90	438-8838	5/16-18 x 1-3/4 lg. *	136	750-125	Sleeve
		Wheel Rim - Front	91	711-218	Belt Guard	137	716-102	Snap Ring
		Wheel Assy. - complete **	92	438-8591	Clutch Rod	138	736-163	Washer
		Bearing - Flange	93	438-8653	Frame Sub-Ass'y - Front	139	312-9284	Belt Guard - Engine
		Hex Nut Top Lock 3/8-16 Thd. *	94	310-8817	Foot Pedal Assy	140	723-207	Steering Wheel Cap
		Front Wheel Assy. (140-650, 140-665), (140-660, 140-665)	95	722-109	Lift Handle Assy (complete)	141	715-121	Spool Pin 1/4 x 2 lg.
			96	438-8616	Knob - Shift Red	142	726-118	Plug - Button (Recoil)
					Guard Assy - Belt	143	750-141	Spacer
						144	321-9315	Support Tube
						145	750-127	Space (not shown)

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

†Part of Lift Handle Assembly (complete) 310-8817.

When ordering this part the prefix (first three numbers) designate the color. Use the appropriate prefix to order your parts.

For example 313-8895 Fender Left Hand ... Coppertone 313 / Yellow Gold 317 / Terra Cotta 330 / Scarlet Red 347 / Sierra Red 371

**When ordering tires include all the information on the sidewall of the tire such as the size and brand name.

PARTS ILLUSTRATION FOR TRANSAXLE

(PEERLESS MODEL 1205)

Ref. No.	Part No.	DESCRIPTION	Ref. No.	Part No.	DESCRIPTION
1	784095	Lever & Housing Ass'y (Includes Nos. 2 thru 7)	34	778021	Gear, Spur (26 Teeth)
2	792016	Ring, Snap	35	786014	Spacer
3	792001	Ring, Quad	36	778022	Gear, Spur (22 Teeth)
4	792002	Pin, Roll	37	786015	Spacer
5	784088	Housing, Shift Lever	38	778023	Gear, Spur (16 Teeth)
6	784094	Keeper, Shift Lever	39	776015	Shaft, Input
7	784096	Lever Shift	40	778024	Spur Gear, Input Shaft
8	784056	Rod Ass'y, Shift (Includes Nos. 9 thru 12)	41	780001	Washer
9	792003	Spring	42	786017	Spacer
10	792004	Ball, Steel	43	778036	Gear, Output
11	784004	Fork, Shifter	44	778041	Pinion, Output
12	784057	Rod, Shifter	45	788008	Seal, Oil
13	784054	Rod Assembly, Shift (Includes Nos. 9, 10, 11, 14 and 55)	46	782022	Hsg. & Bushing Ass'y, L.H. Axle (Includes No. 51)
14	784055	Rod, Shifter	46A	782023	Hsg. & Bushing Ass'y, R.H. Axle (Includes No. 51)
15	774067	Axle w/2 Key Seats - L.H.	47	772045	Cover Assembly, Transaxle (Includes Nos. 57 & 58)
15A	774068	Axle w/2 Key Seats - R.H.	48	770033	Case Assembly, Transaxle (Includes Nos. 56 & 57)
16	780042	Washer, Thrust	49	792007	Screw, Socket Head Cap 1/4-20 x 3.4
17	792020	Screw, Hex Hd. Cap 1/4-20 x 2-1/4	50	786026	Pin, Dowel
18	792006	Lockwasher, 1/4"	51	780054	Bushing
19	778033	Gear, Ring	52	792010	Plug, Pipe
20	786019	Pin, Drive	53	778039	Gear, Bevel
21	786027	Block Drive	54	792018	Ring, Snap
22	778014	Pinion, Bevel	55	792017	Ring, Snap
23	776022	Pinion & Bushing Ass'y, Idler	56	780011	Bearing
25	776014	Shaft & Bearing Ass'y, Shifter (Includes No. 26)	57	780013	Bearing
26	780018	Bearing	58	780055	Bearing
27	778037	Gear, Idler	59	792012	Screw, Socket Head Set 3/8-16 x 3/8
28	776032	Shaft, Idler	60	788009	Seal, Oil
29	784074	Stop, Shifter	64	776008	Shaft, Reverse Idler
30	788026	Gasket, Case to Cover	65	786008	Spacer, Reverse Idler
31	788003	Gasket, Shift	66	778016	Idler, Reverse
32	778019	Lever Housing	68	780039	Bearing, Thrust
33	778020	Gear, Shifting	69	774029	Carrier, Differential
			70	774028	Carrier, Differential

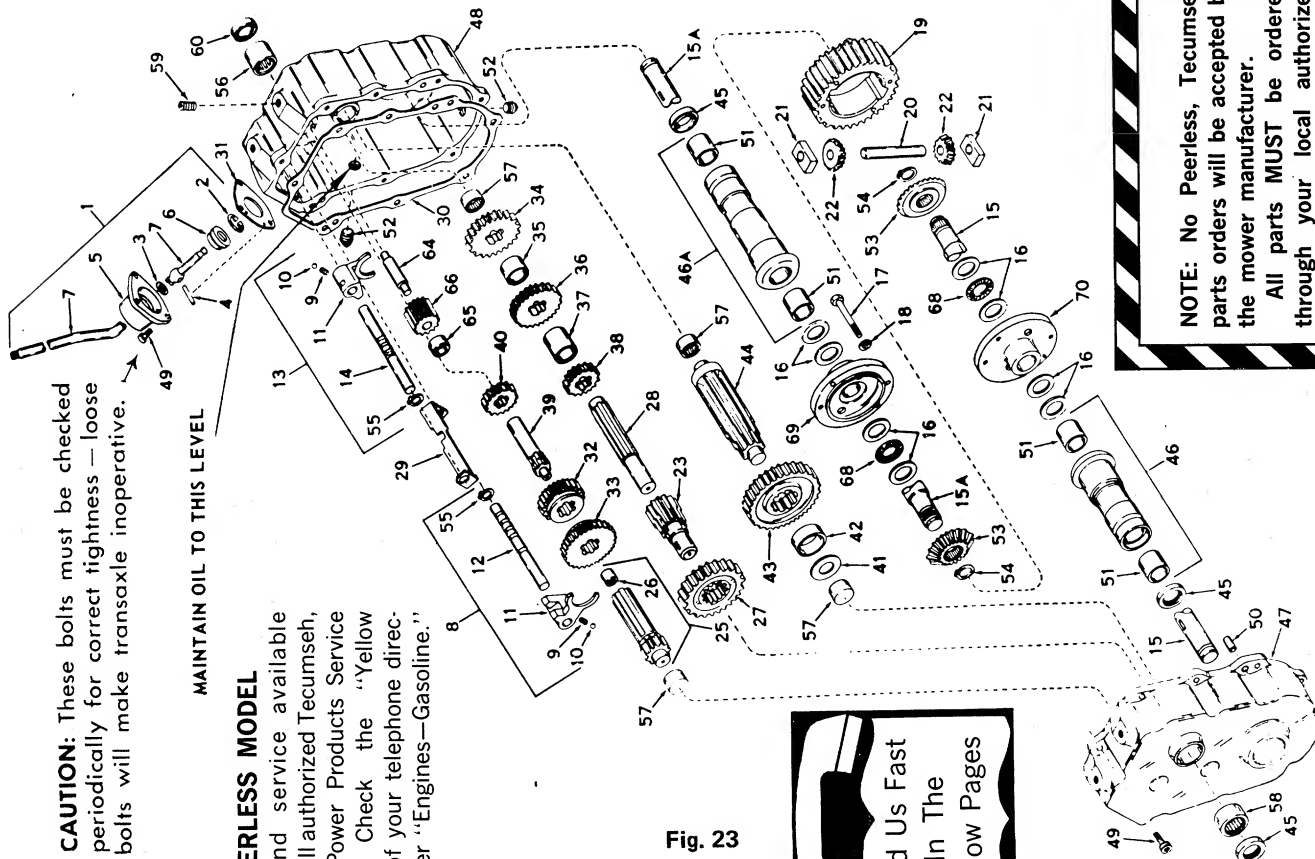


Fig. 23

32" MOWING UNIT

MODEL NO. 191-651

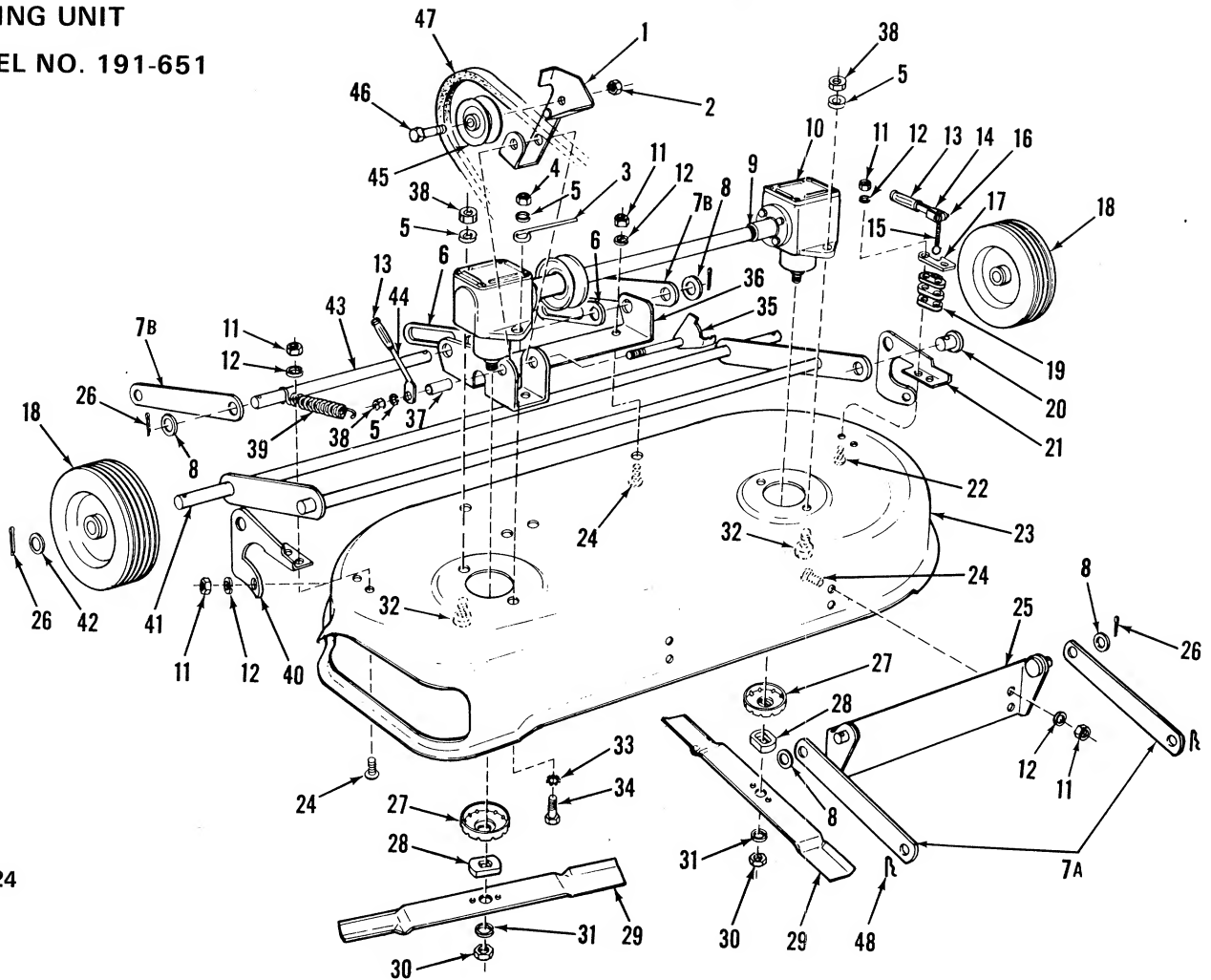


Fig. 24

PARTS LIST FOR MOWING UNIT

Illus. No.	Part No.	DESCRIPTION	Illus. No.	Part No.	DESCRIPTION
1	310-8627	Idler Bracket Assembly	25	321-8666	Front Deck Bracket Assembly
2	712-116	Hex Elastic Nut 3/8-24 Thread *	26	714-115	Cotter Pin 1/8 Dia. x 1" long *
3	723-148	Belt Guard	27	310-8855	Cup — Drive
4	712-711	Hex Jam Nut 3/8-24 Thread *	28	748-140	Drive Collar
5	736-169	Spring Lockwasher for 3/8 Screw *	29	321-8669	Mower Blade
6	321-8631	Lockout Link	30	712-923	Center lock Jam Nut 5/8-18 Thread *
7	321-8632	Deck Link	31	736-158	Spring Lockwasher for 5/8 Screw *
8	736-466	Flat Washer 17/32 I.D. x 15/16 O.D. - 18 GA. *	32	710-253	Hex Head Cap Screw 3/8-16 x 1" long *
9	716-107	"E" Ring *	33	736-148	Ext. Lockwasher for 3/8 Screw *
10		Right Angle Drive Assembly	34	710-191	Hex Head Cap Screw 3/8-24 x 1-1/4 long *
11	712-267	Hex Nut 5/16-18 Thread *	35	321-8660	Lockout Bracket Assembly 8660
12	736-119	Spring Lockwasher 5/16 Screw *	36	321-8652	Rear Deck Bracket
13	305-2186	Grip	37	750-126	Spacer
14	310-8696	Adj. Handle Assembly	38	712-798	Hex Nut 3/8-16 Thread *
15	711-204	Adj. Screw	39	732-178	Spring
16	715-103	Roll Pin 1/8 Dia. x 3/4 long *	40	321-8636	Mounting Bracket — R.H.
17	310-8634	Keeper Plate	41	321-8684	Wheel Bracket Assembly
18	312-10233	Wheel Assembly	42	736-116	Flat Washer .625 I.D. x .937 O.D. .062
19	310-8633	Spacer Plate (3)	43	321-8668	Shaft
20	711-202	Adj. Ferrule	44	310-8662	Lockout Handle
21	321-8637	Mounting Bracket — L.H.	45	756-116	V-Idler
22	710-161	Carriage Bolt 5/16-18 x 1-1/4 long *	46	710-113	Hex Head Cap Screw 3/8-24 x 1-5/8 long *
23	321-8678	Deck Assembly	47	754-113	"V" Belt 21/32 x 48 long *
24	710-260	Carriage Bolt 5/16-18 x 5/8 long *	48	714-101	Cotter-Hairpin

* For faster service obtain standard nuts, bolts, and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

RIGHT ANGLE DRIVE MODEL NO. (PEERLESS MODEL RA 15752)

FOR 32" MOWING UNIT 191-651

NOTE: No Peerless, Tecumseh parts orders will be accepted by the mower manufacturer.

All parts **MUST** be ordered through your local authorized Tecumseh service dealer.

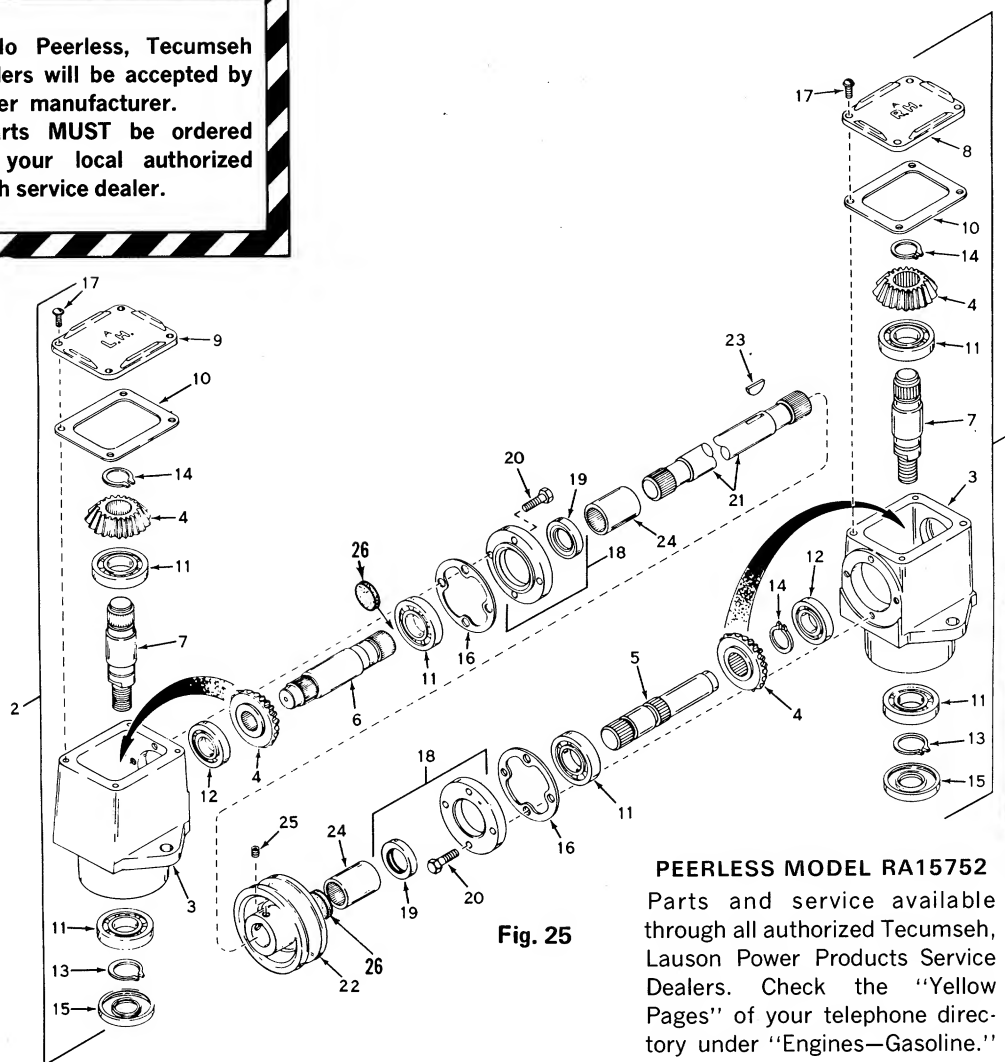


Fig. 25

PEERLESS MODEL RA15752

Parts and service available through all authorized Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

Find Us Fast
In The
Yellow Pages

PARTS LIST FOR RIGHT ANGLE DRIVE MODEL NO. (PEERLESS MODEL RA 15752)

Ref. No.	Part Number	PART NAME
1	794001	Head Assy., Right Hand (Incl. Nos. 3, 4, 5, 7, 8 and 10 thru 18)
2	794002	Head Assy., Left Hand (Incl. Nos. 3, 4, 6, 7, and 9 thru 18)
3	770026	Housing, Right Angle Drive
4	778046	Gear, Miter
5	776040	Shaft, Input Pinion
6	776041	Shaft, Input Pinion
7	776042	Shaft, Output
8	772034	Cover, Right Hand
9	772035	Cover, Left Hand
10	788028	Gasket, Cover
11	780034	Bearing, Ball
12	780024	Bearing, Ball
13	788019	Ring, Snap
14	788018	Ring, Snap
15	788029	Seal, Oil
16	788030	Gasket, Cap
17	792025	Screw, Rd. Hd. Self Tap, 10-24 x 1/2
18	786029	Cap & Seal Assy., Retainer (Incl. Nos. 19 & 20)
19	788031	Seal, Oil
20	792026	Screw, Hex Hd., 1/4-20 x 7/8
21	776043	Shaft, Input Connector
22	786037	Sheave
23	788020	Key, Woodruff, 3/16 x 3/4
24	786031	Coupling, Input Shaft
25	792027	Set Screw, Knurled Hd. Cup Pt., 5/16-24 x 1/4
26	1135-X 1	Felt Disc